

Respondent: Anderson Municipal Light & Power

At the last Electric Service Quality Workshop in September, Staff stated it would issue a short follow-up data request regarding power quality. The Commission recognizes that not everyone who receives this data request will have the experience or information to respond. However, we have circulated the data request to everyone so that everyone is aware of the on-going process related the electric service quality.

Over the course of the workshops we have discussed three broad categories of electric reliability problems: Sustained outages have been defined as interruptions in service lasting more than five minutes and requiring utility intervention to restore service; Momentary outages, for our purposes, have been identified as service interruptions of less than five minutes in which service is restored without utility intervention; Power Quality problems are deviations in the nature or character of the electricity which may affect the performance of customers' electric equipment.

1. From a customer's perspective, how are power quality problems usually described/identified, i.e. what does the customer complain about?
 - A. The highest number of complaints comes from customers complaining of flickering lights. These are often air conditioners starting or another appliance starting. Sometimes customer problem.
 - B. Complaints of high or low voltage are often customer application problems.
 - C. Complaints of customers that they're lights go off momentarily at all hours and wonder why. The explanation of overcurrent equipment operation usually satisfies their concern.
 - D. Lights out is usually notifying the utility and inquiring when they'll be back on.
2. Are the complaints and/or problems different for residential or small commercial customers versus large commercial or industrial customers? If so, please explain how the complaints are different.
 - A. Small commercial and residential are usually minor annoyances for the customer. A few may reflect a potentially damaging problem. Large industrial are more rare but may be potentially more damaging.
3. What steps does your utility take to address power quality complaints?
 - A. Send service man to investigate and set a power recorder if warranted. Report findings to customer and initiate revisions if indicated. Follow up as needed.
4. Does your customer call center categorize power quality complaints separately?
 - A. No.
 - If so, how many power quality complaints have there been in the last 12 months? How were these complaints resolved?

If not, please estimate how many power quality complaints there has been over the last 12 months and how they were resolved.

A. Estimate 75 or so. Set recorder to study problem. Check all connections and replace bad equipment. Help customer understand how they are causing problem. Rearrange facilities as needed.

5. Are there actions customers can take to insulate their equipment from power quality problems? If so, please explain what actions could be taken.

A. Customers can install UPS's to reduce or dispel problems with momentary interruptions to computers. Equipment is available for timers to ride through momentary blips. Read owner's manuals and follow cautions for equipment in use on premises. Have wiring inspected by qualified service people occasionally. Have secondary surge arresters installed. Verify that premises grounds are bonded properly.

Anderson Municipal Light & Power, R. E. Hildreth, T & D Supervisor

cc: T. E. Donoho, Supt.